



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/374,117	08/16/1999	NICHOLAS F. FORTE	PM-251091	3340

909 7590 08/23/2002

PILLSBURY WINTHROP, LLP  
P.O. BOX 10500  
MCLEAN, VA 22102

EXAMINER

ROCHE, LEANNA M

ART UNIT PAPER NUMBER

1771

DATE MAILED: 08/23/2002

19

Please find below and/or attached an Office communication concerning this application or proceeding.

TC-19

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/374,117	FORTE, NICHOLAS F.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Leanna Roche	1771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 June 2002.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 26-29 and 32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 26-29 and 32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 26-29 and 32 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claims 26 and 32 state "where upon stretching the microporous adhesive core layer has at least 27.6% microvoids". As support for this range, Applicant cites pages 53 and 54. However, the tables set forth on pages 53-54 only show %voids values from 0% to 42%. The phrase "at least 27.6%" indicates that the %void value can be any percentage greater than 27.6%. However, the specification only provides support for %void values less than 42%. Therefore, there is no support for the claimed range "at least 27.6%".

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application

Art Unit: 1771

published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or  
(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

4. Claims 26-29 and 32 are rejected under 35 U.S.C. 102(e) as being anticipated by McCormack et al. (USPN 6075179).

McCormack is directed to breathable, multi-layer films for use in personnel care absorbent articles such as diapers, sanitary napkins, bandages, etc. (Column 2, lines 46-53). The core layer of McCormack may be comprised of polyolefins (Column 3, lines 42-47) and particulate fillers with average particle sizes in the range of about 0.1 to about 7 microns (Column 4, lines 2-3). If sufficient filler is used in combination with sufficient stretching of the film, voids can be created around the particles contained within the core layer thereby making the core layer breathable and moisture vapor permeable (Column 4, lines 3-12). Additionally, the core layer acts to adhere two skin layers together to form an overall liquid impermeable composite (Column 13, lines 23-30). The skin layers of McCormack are comprised of sheets of hydrophilic polymeric material, such as ethylene vinyl acetate, polyesters, polyamides and ethylene vinyl alcohol (Column 4, lines 19-32), which are disclosed as suitable hydrophilic polymeric materials in Applicant's specification at page 14, lines 13-29. The skin layers of McCormack may be substantially free of particulate filler (Column 2, lines 30-33) and are water vapor permeable and antimicrobial (Column 4, lines 15-19). The three films of McCormack are coextruded so that the outer skins are bonded to the core in a complete and uniform manner. Because the skin layers of McCormack may be antimicrobial, this reads on a barrier to microorganisms. The laminate of McCormack

may be used in diapers, feminine hygiene products and bandages as the liquid impermeable absorbent core (column 7 lines 26-45). This reads on a barrier to blood and bodily fluids.

McCormack teaches the claimed breathable film but does not specifically state that their core layer is microporous having at least 27.6% microvoids. However, it appears that core layer of McCormack is substantially identical to the presently claimed microporous adhesive core layer because both are comprised of the same resin and particulate fillers with average particle sizes in the same range, both may be stretched to create voids around the filler particles, and both bond together two outer hydrophilic polymeric resin layers of the same composition. Thus, it is believed by the examiner that core layer of McCormack is inherently microporous having at least 27.6% microvoids. Additionally, even though McCormack does not specifically disclose that the pores of the core layer are micropores and does not specifically disclose the value of the porosity of the core layer, Antoon, Jr. et al. (USPN 5011698) evidences that stretching a polyolefin film containing filler with particle sizes ranging from 10 to 25 microns results in a microporous breathable film having a porosity of at least 30% which is useful for producing breathable films which are vapor permeable but liquid impermeable for use in feminine care products and diapers.

McCormack discloses a multi-layer film wherein each of the skin layers comprises 2 percent of the overall film thickness and the core layer comprises 96 percent of the overall film thickness (Example 2). McCormack also discloses the ability to reduce cost by relegating the most costly ingredients to the outer layers which

represent the smallest proportion of the overall multi-layer film. However, McCormack does not specifically disclose percent by volume values for the core and skin layers. It appears that the multi-layer film of McCormack is substantially identical to the presently claimed multi-layer film because both are comprised of substantially the same materials using substantially the same method. Both disclose a coextruded multi-layer film comprised of a core layer of polyolefin and calcium carbonate filler and skin layers of polyester or polyamide or ethylene vinyl alcohol or ethylene vinyl acetate, wherein the film is coextruded, cooled, sent to a machine direction orienter, preheated, stretched at a draw ratio around 4 and subsequently annealed. Thus, it is believed by the examiner that the multi-layer film of McCormack would inherently possess percent by volume values within Applicant's presently claimed ranges.

### ***Response to Arguments***

5. Applicant's arguments filed June 21, 2002 with regard to Langley (USPN 5560974) in view of Reed (USPN 5653699), are sufficient to overcome the previous rejection set forth in Paper No. 14, paragraph 5 because neither Langley nor Reed disclose the claimed particulate filler in the core layer.
6. The 35 USC 103 rejections over McCormack et al. (USPN 6075179) have been withdrawn because they are no longer applicable due to the CPA filing date of June 21, 2002 and the admission of common ownership at the time of filing.
7. With regard to the McCormack et al. (USPN 6075179), upon further review, the examiner has determined that an inherency rejection over claims 27-29 is more

applicable than the previously set forth obviousness rejections in Paper No. 14, paragraphs 6 and 7. Applicant's arguments filed June 21, 2002 with regard to McCormack et al. have been fully considered but they are not found persuasive. Applicant contends that McCormack is silent with respect to laminates comprised of microporous adhesive core layers that exhibit any particular amount of microvoids upon stretching. As stated above, McCormack teaches a core layer which bonds two outer skin layers together. The core layer is comprised of a polyolefin resin containing fillers with an average particle size within Applicant's claimed range. McCormack also discloses that if sufficient filler is used in combination with sufficient stretching of the film, voids can be created around the particles contained within the core layer thereby making the core layer breathable and moisture vapor permeable (Column 4, lines 3-12). McCormack also discloses stretching the extruded multi-layer films 4x. Antoon, Jr. shows that stretching a polyolefin film containing filler with particle sizes ranging from 10 to 25 microns results in a microporous breathable film having a porosity of at least 30% which is useful for producing breathable films which are vapor permeable but liquid impermeable. Because McCormack, Antoon, Jr., and the present application are all directed to a breathable film layer comprised of substantially the same materials using substantially the same method, it is the examiner's position that the core layer of McCormack would inherently possess microporosity of at least 27.6%.

**Conclusion**

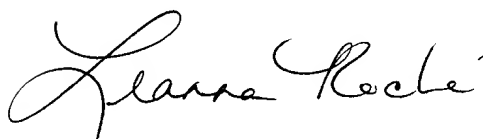
8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Antoon, Jr. et al (USPN 5011698) teaches stretching polyolefin films containing calcium carbonate filler to produce microporous breathable films.

**Contact Information**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leanna Roche whose telephone number is 703-308-6549. The examiner can normally be reached on Monday through Friday from 8:30 am to 6:00 pm (with alternate Mondays off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on 703-308-2414. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.



lmr

August 15, 2002



TERREL MORRIS  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1700